T. Hirashima et al. (Eds.) (2011). Proceedings of the 19th International Conference on Computers in Education. Chiang Mai, Thailand: Asia-Pacific Society for Computers in Education

Connecting online with external students: Do we really know how to?

Shaun NYKVIST
Queensland University of Technology, Australia
s.nykvist@qut.edu.au

Abstract: Students are often time poor and find it difficult to manage their time in relation to study and other external factors including work. Online study is no exception to this and in many cases where the student is studying in an online only environment, they are also working in full time employment. Higher Education institutions are now offering an abundance of courses online to attract more under-graduate and post-graduate students. It is in this sense that there is an ever-increasing need to understand the student of today and find ways to connect with them and support them in their studies. This paper will report on a small-scale case study of an undergraduate online-only group of first year education students and their associated online experiences in developing a sense of community whilst interacting with a learning management system and its associated tools. Further the paper will explore the mis-conceptions that are widely held by course designers and lecturers involved with online courses.

Keywords: e-learning, web-based learning, Internet Based Students, External Students, Online learning, Virtual environments, communities of practice

Introduction

Over the last decade the Internet has evolved from being a tool used by a few dedicated educators to a tool used by the majority of educators, even if it is for the simple searching of information and resources. Where it was once used in an ad-hoc manner, it has now become mainstream and compulsory in a large number of Higher Education Institutions (HEIs). Its flexibility and access have been a driving force for its success in Higher Education [1; 11], especially through the use of learning management systems (LMS). However, there is often a number of myths associated with the use of the Internet in learning and teaching activities [2; 12]. These myths include the potential cost savings of running classes in an online only mode, decreased preparation for online classes as compared to traditional classes, provision of even more information and resources to further enhance the learning experience and a decrease in absenteeism and dropouts due to online learning [12]. It is also in this context that another myth surfaces around the information and communication technology (ICT) literacy skills of new students entering an online course for the first time.

The ICT literacy skills are essential to any student participating in an online only course, however, it is often assumed that a large majority of new students would have these skills because they are of Generation Y (born after 1980). Labels such as this are often applied to today's student that also often identifies them as being a digital native [3] or of Generation C, which is often referred to as a generation of content creators [5]. This has had a flow on affect that implies that many new students should be competent in using digital technologies, as they have grown up with the technologies. However, this is not always the case [3], yet a number of academic institutions have mandatory requirements for online participation in all units and courses of work for access to resources and content (including enrolment procedures).

In an attempt to understand and respond better to today's online learner, this paper will describe a small scale study (N=40) of first year under-graduate students who are studying completely online with no face-to-face or blended learning opportunities. The study is a work-in-progress which will also attempt to provide recommendations for future online course design.

1. The Community Approach

With the adoption of learning management systems in HEIs there is a commonly held observation that these systems will bring together all the necessary online tools (e.g. forums, wiki's, blogs) that are needed for a successful online course. There has also been an emphasis on the web 2.0 notion of online tools which makes these resources much more accessible to the student [14] and more akin to the tools that they are believed to be using in their personal lives. It is through these systems and tools that educators attempt to facilitate a sense of community through the various interactions that will occur. In essence, the formation of communities of practice (COP), has been a central theme in using Internet based tools [14; 4]).

Brown [4] claimed that the "most promising use of the Internet is where the buoyant partnership of people and technology creates powerful new online learning communities" (p. 19) and Nonaka [13] argued that "communities of interaction contribute to the amplification and development of new knowledge" (p. 15). Notions such as these, and those raised incidentally in the previous section, of online learning communities allow educators to rethink their approaches to teaching and learning to create environments which are both collaborative and social. Online communities – including collaboratories [17] – are said to be creative, challenging and thought provoking in nature [8].

Participation in active communities allows students with a shared sense of identity [6] the opportunity to solicit and share knowledge while developing common ground or inter-subjectivity with their peers and teachers [9; 15]. Further to this, communities allow individuals, through moving from "interpersonal to intrapersonal" to consolidate personal understanding and meaning [7], (p. 36). In this, they are not dissimilar to Woodruff's [16] definition of such communities as an "amalgamation of ideas" (paragraph 3).

2. Todays' Student

This study of first year education students (N=40) occurred in first semester 2011 (still in progress) and identified that 22.5% of the students could be labeled as Generation Y students, with the remainder being Generation Z (born 1979 or before). To make the assumption that a majority of the students in this course could be labeled digital natives would be a mistake. Only 22.5% of the students could be seen as digital natives – having grown up with the technologies.

Of these 22.5% of students that could be labeled digital natives only 1 student did not have a problem during the university enrolment procedure even though only one of the Generation Y students felt nervous about using a computer. From the total number of participants, 65% (n=26) of students indicated some problem or frustration during the enrolment process. When students were surveyed about their enrolment experience, a student commented, "*No*

- found it very frustrating and had to call student services 3 times - isn't explained well in the step by step instruction".

With a number of universities taking their enrolment to an online only process, results here indicate that there are a number of issues for students including those deemed to be in the category of digital natives. There is a real need to ensure that all students have a seamless process in online enrolment, especially of they have never been subject to using the Internet to complete forms.

While there can be seen to be issues from an enrolment perspective, it is interesting to note that 77.5% of students used web 2.0 application such as Facebook©, while 75% of students chatted with others through instant messaging tools such as MSN Messenger© or Yahoo©. This does indicate that students were able to use social media tools that were important to them and allowed them to connect on a social nature. In education there tends to be very few digital tools designed specifically for Higher Education [10] and there seems to be a real disconnection between playing (or interacting outside of formal education) and learning [12].

While the notion of a community of learners is identifies as strength in online education, establishing this sense of community can be very difficult where students do not actively participate unless it is compulsory for marks. Students in the study were given opportunities to participate using Discussion Forums and Wiki's, however 100% of students did not use the discussion Forums within the LMS, with many citing difficulties in using the Blackboard environment. The Wiki exercise for students was a little more successful with 17.5% of students making a single contribution only (excluding moderator posts and messages), while there were a total of 101 views of the wiki indicating multiple views by some participants. The success rate of these web 2.0 based tools within Blackboard was limited with many students indicating that they could not see them as useful. When asked about the usefulness of the Discussion Forum's and Wiki a student responded claiming, *"these forums could be useful but I need to choose what things will most help my assignment as I don't have much time after work".*

As is evidenced in this study, building a sense of community through commonly used tools is difficult, especially when students are time poor. 95% of all the students participating in this online course worked in full time job in an educational centre as ac carer or administrator. Students were primarily focused on completing the assessment and passing the unit as opposed to establishing this sense of community. However, there was one tool which seemed to be very successful with this group, with an average of 67.5% of students participating and on some occasions there was 100% full participation. This tool was a real time synchronous application called Eluminate© which allowed students to use real time text and audio based chat as well as share information through a virtual whiteboard. When students were asked if they found the Eluminate© sessions useful 85% of the participants responded positively to these sessions. When students were asked to give reasons why they found the Eluminate© sessions useful, one student responded claiming that they *"can get instant feedback, listen to other views, can be used to play back for missed information"*.

An initial analysis of the recorded Eluminate© sessions has revealed that students wee initially most concerned about how they should complete their assessment tasks and often asked for clarification. Once the clarification had been resolved, students would then participate in the planned non-compulsory online discussion (moderator initiated). This discussion was focused on trying to develop argument and often involved starter statements

that would evoke a critical response. For example, *"Students in the early years should use drill and practice type software to reinforce concepts developed in class" or "Students in early childcare centres do not need to be taught about ethics and Morals as it will only apply to them when they want to download music when they are older" (Moderator, 2011).*

Students commented on how much they enjoyed these sessions with one student claiming that *these Eluminate sessions are the best, I really wish all our other units used these – I will really miss them".* It was the real time synchronous communication with active participation with the lecturer that made these sessions such a great success for so many students. This was something that could not be achieved through the other web 2.0 tools that were available within the Blackboard© environment.

3. Future Online Course Design

While the study attempted to understand current behaviours of how students work online and to identify ways to connect with online only external students, it is still a work in progress with these initial observations able to assist future online course design. The development of a community of practice is seen as a strong proponent in any online course, yet the reality of that sense of community could only partially be realised through the synchronous online Eluminate© sessions held each week at 1930hrs on a Monday night. In this case study, students were time poor and exhausted with many of them in full time employment. This was another complexity that had to be considered in the design of the course and how best to connect with the students.

Future planning should consider the background of the students coming in to the course and avoid stereotypical labels that are often applied. Even if students have grown up with the technology, it does not automatically mean that he students will be confident with using the tools within an LMS, even if they are regular users of other online tools such as Facebook© that they use in their own leisure time. There is often a large disconnect between these social tools and learning. In this study, there were students who could be classified as Generation Z that were more confident and familiar with using online tools as opposed to those classified as Generation Y or digital natives.

In designing an online course an LMS should be a starting point and should not be considered the total solution, but rather part of the overall solution. Multiple online tools coupled with an LMS would allow for the online designer to better match the technologies to the experiences of the user, hence providing a much richer experience. Supporting this would be the need for more specifically designed educational online learning tools.

References

[1] Allen, I., & Seaman, J. (2007). *Online Nation: Five years of growth in Online Learning*. The Sloan Consortium: Needham, MA.

[2] Bach, Shirley, Haynes, P. and Lewis-Smith, Jennifer (2006) Online learning and teaching in higher education Open University Press, Berkshire.

[3] Bennett, S.; Maton, K.; Kervin, L. (2008), "The 'digital natives' debate: A critical review of the evidence", *British Journal of Educational Technology*, 39 (5): 775–786

[4] Brown, A., & Campione, J. (1990). Communities of learning and thinking, or a context by any other name. In D. Kuhn (Ed.), *Developmental perspectives on teaching and learning thinking skills (Contributions to Human Development Series)* (pp. 108-126)). Basle, Karger.

[5] Bruns, Axel (2007) Beyond Difference: Reconfiguring Education for the User-Led Age. *In ICE 3: Ideas, Cyberspace, Education*, Ross Priory, Loch Lomond, Scotland, 21-23 March 2007.

[6] Cole, M. (2002). Virtual communities for learning and development- A look to the past and some glimpses into the future. In K.A. Renninger & W. Shumar (Eds.), *Building virtual communities* (pp. 1-3). Melbourne, Australia: Cambridge University Press.

[7] Gibson, S. (2003). Narrative of a pre-service teacher. *English Teaching: Practice and Critique*, 2(3), 35-46.

[8] Hartnett, M., Bhattacharya, M., & Dron, J. (2007). *Diversity in online learners: Searching for differences that may matter.* Retrieved July 31, 2007, from http://csdl2.computer.org.

[9] Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.

[10] Laurillard, D. (2008) *Digital technologies and their role in achieving our ambitions for education. Inaugural professorial lecture*, 26th February 2008. London: Institute of Education. Retrieved on April, 2011 from https://docs.google.com/viewer?url=https%3A%2F%2Fsites.google.com%2Fa%2Flkl.ac.uk%2Fldse%2Fpublications%2Fpublicatinos%2FLaurillardinaugurallecture.pdf%3Fattredirects%3D0%26d%3D1

[11] Maguire, L. (2005) Literature review – faculty participation in online distance education: Barriers and motivators, *Online Journal of Distance Learning Administration*, 8(1). Retrieved on February 12, 2008, from http://www.westga.edu/%7Edistance/ojdla/spring81/maguire81.htm.

[12] Njenga, J. K. & Fourie, L. C. (2010). The Myths about e-learning in Higher Education. *British Journal of Educational Technology* (pp. 199-212), March 2010.

[13] Nonaka, I. (1994). A dynamic theory of organisational knowledge creation. *Organisational Science*, 5(1), 14-37.

[14] Nykvist, Shaun S. (2008) Creating contexts for effective online communities of practice. In: Yelland, Nicola and Neal, Greg A. and Dakich, Eva (Eds.) *Rethinking Education with ICT: New directions for effective practices*. Sense Publishers, Rotterdam, The Netherlands, pp. 165-180.

[15] Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.

[16] Woodruff, E. (1999). Concerning the cohesive nature of CSCL communities. Paper presented at the 1999 *Computer Supported Collaborative Conference*, Mahwah, New Jersey.

[17] Lunsford, K. J., & Bruce, B. C. (2001, September). Collaboratories: Working together on the web. *Journal of Adolescent and Adult Literacy*, *45*(1), 52-58.